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ABSTRACT

Noting that where child care subsidy recipients work has relevance for both policy and advocacy related to families moving off of welfare, this paper examines findings from seven studies of the issue in Florida, Alabama, Oregon, California, and the District of Columbia. Following introductory comments, Section 2 of the report presents the background for the seven studies. Section 3 summarizes the methodology used in the studies and describes variations among the studies. Section 4 discusses findings and makes recommendations for further study. Section 5 examines the implications of the findings for employers, child care providers, businesses, and policymakers. The primary data sources included subsidy records maintained by child care managing agencies, parent interviews with counselors, and overall employment data. Among the major findings of the studies are the following: (1) the retail and services industries employ the majority of subsidy-receiving workers; (2) the retail industry is the most common employer in each geographic area; (3) industries that are broadly classified as services industries are the second most common employers; (4) the employment pattern of subsidy-recipients and that of the overall labor force are quite different; and (5) local labor market conditions determine the size and importance of industries other than retail and services industries. Six appendices include lists of funding and data sources, additional data tables, standard industrial classification codes, North American industry classification system codes, and a guidebook to help other communities and states replicate the study. (Contains 12 references.) (KB)

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A View from Four States and the District of Columbia

Parents Receiving Child Care Subsidies

Where Do They Work?

Kumiko Okuyama
Roberta B. Weber

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Oregon Child Care Research Partnership *October 2001*

About the Employer Child Care Studies Residency Roundtable

In November 1998, eight participants worked together in Portland, Oregon on the topic of employment patterns of parents receiving subsidized child care. They represented the perspectives of child care administrative staff, researchers, and child care practitioners. Participants included:

- Patricia L. Divine, Child Care Bureau, Administration on Children, Youth and Families, Administration for Children and Families, Department of Health and Human Services, Washington, DC
- Janis Elliot, Clackamas School District, Milwaukee, Oregon
- Arthur C. Emlen, Portland State University, Portland, Oregon
- Magaly Queralt, Florida International University, Miami, Florida
- Karen Tvedt, Portland State University, Portland, Oregon, now at Child Care Bureau, Administration on Children, Youth and Families, Administration for Children and Families, Department of Health and Human Services, Washington, DC
- Ann Witte, Wellesley College, Wellesley, Massachusetts, and Florida International University, Miami, Florida
- Bobbie Weber, Linn-Benton Community College, Albany, Oregon
- Wendy Woods, Oregon Child Care Division, Salem, Oregon.

Ann Witte and members of the Wellesley Child Care Research Partnership designed and carried out a study of the employment patterns of parents receiving child care subsidies in nine Florida counties. The study was replicated in additional counties in Florida and also in Alabama, Oregon, California, and Washington, DC. Participants of the roundtable reviewed and discussed the existing employer studies. They identified key findings, articulated methodologies, and developed a list of policy implications. Participants also outlined a guidebook for other researchers who wanted to replicate the study. The Oregon Child Care Research Partnership acknowledges its appreciation of the contributions of the original research team and roundtable participants.

About the Residency Roundtables

A Residency Roundtable is a strategy to support cross-state learning and research development. The roundtables are designed to move forward understanding on a critical policy issue. Researchers, state child care staff, and child care practitioners from a diverse set of states come together with Oregon partners for three days of shared learning and problem solving of issues on which Oregon partners and invitees bring expertise.

About the Oregon Child Care Research Partnership

The Oregon Child Care Research Partnership has ten years' experience working together on policy-focused research. Researchers from two major state universities work with staff administering the state child care programs, a community college's family support program, the Oregon Progress Board, Head Start, Department of Education, Oregon Child Care Resource and Referral Network, the Career Development Center, the National Association of Child Care Resource and Referral Agencies, and Parent Voices. Working with the Child Care Bureau, other federal offices who provide leadership on child care, Child Care Policy Research Consortium partnerships, and other national organization, the Oregon Partnership works to enhance the capacity of states to do state-specific, policy-relevant research.

About the Child Care Policy Research Consortium

The Child Care Policy Research Consortium is an initiative of the Child Care Bureau in the Administration on Children, Youth and Families, Administration for Children and Families, U.S. Department of Health and Human Services. In its unique approach to policy-relevant research, the Consortium brings together researchers, state child care administrative staff, and child care practitioners from across the United States. Partnerships focus on state-relevant policy research, and the Consortium identifies cross-state themes, trends, and findings. Effective use of state administrative data for informing state policy is a common thread in a diverse set of research efforts specially focused on the needs of children in low-income families.

This paper is a product of the Oregon Child Care Research Partnership, which is supported in part by the Child Care Bureau in the Administration on Children, Youth and Families, Administration for Children and Families, U.S. Department of Health and Human Services.

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Introduction

The Personal Responsibility and Work Opportunity Act of 1996, commonly known as PRWORA,[1] emphasizes employment. With its emphasis on time limits and work requirements, PRWORA makes it imperative that low-income parents find both a job and child care. A study of employment patterns of low-income parents using child care subsidies in order to work provides a valuable opportunity to increase our knowledge of an important characteristic of low-income working parents.

For any working parent, finding stable employment with enough flexibility to meet parental responsibilities is not an easy task, and the challenge is greater for those who lack financial resources, education, and work experience. Knowing employment patterns of low-income parents is a first step toward understanding conditions of the working poor with children. A systematic analysis of where parents receiving child care subsidies are employed enhances our understanding of what is happening to families moving out of welfare. In which occupations are they finding jobs? Which industries are they able to penetrate? Prior to the studies that form the basis of this paper, there appeared to be no systematic study of where parents receiving child care subsidies are employed.

This paper is a product of the Child Care Policy Research Consortium, a collaborative group of researchers that carries out policy-relevant research through partnerships of researchers, state child care administrators, and child care resource and referral practitioners. Through this national collaboration of state partnerships, the Consortium is able to report cross-state findings and compare results from seven studies in four states and the District of Columbia with regard to the employment of parents receiving subsidies.

The first Consortium study, "Parents receiving subsidized child care: Where do they work?" (Lee, Ohlandt, and Witte, 1996) has had significant impacts on both research and policies. The significance of their paper is four-fold. First, they recognized and responded to the importance of this topic and the lack of previous studies. Second, the authors provided a simple but elegant methodology to analyze employment patterns of the working poor with children. Third, their paper had an impact on state policy. Their findings led to the passage of the Florida Child Care Executive Partnership Act in 1996. Through the Child Care Executive Partnership, the state of Florida matches child care contributions of employers dollar for dollar and creates pools of funds to provide child care subsidies for subsidy-eligible workers. This increases the funds available for subsidies and builds support for child care subsidies in the business community. Finally, the study provided a model that is easily replicated at either county or state levels.

This document is organized as follows. The next section presents background of the seven studies. In the third section, we summarize the common methodology used in the studies and describe variations among the studies. In the fourth section, we discuss findings and make recommendations for further studies. In the last section, we examine the study implications for employers, child care providers, businesses, and policy makers.

[1] *PRWORA includes both Temporary Assistance for Needy Families (TANF) and the Child Care Development Fund.*

Background and Context

Four Child Care Research Partnerships have produced seven studies that examine the employment patterns of child care subsidy recipients. While sharing the same basic methodology, these seven studies differ from each other in scope, time period, and data sources used in the analyses. All studies summarized in this report are products of collaboration of key partners. Within the Research Partnerships, state child care administrators and child care resource and referral practitioners provided an understanding of state and local policies and access to administrative data. University partners provided research expertise and enhanced credibility of the studies. The importance of the studies has been acknowledged in the form of financial support from a variety of sources, including the Child Care Bureau, state agencies, and private and public non-profit organizations.

As was mentioned in the previous section, Lee, Ohlandt, and Witte (1996) conducted the first Consortium study to examine employment patterns of recipients of child care subsidies. The inspiration for this study was provided by Susan Muenchow, who was Executive Director of the Florida Children's Forum at the time. Susan saw the usefulness of the information regarding the employment pattern of subsidy recipients. In their first Florida study, Lee and her fellow researchers provided the model for the Consortium studies summarized in this report.

The paper examined the employment patterns of the recipients in nine counties in Florida: Duval, Pinellas, Leon, Gadsden, Jefferson, Liberty, Madison, Taylor, and Wakulla. The counties include Jacksonville, St. Petersburg, and Tallahassee. Areas surrounding Jacksonville and St. Petersburg are mostly urban with concentrations of transportation, finance and insurance, military and manufacturing industries, while areas surrounding Tallahassee are predominantly rural. The employment patterns of the subsidy recipients were compared with the local labor force and with the statewide labor force.

The second Florida study (Griesinger, Chipty, & Witte, 1997) focused on Dade County, the greater Miami metropolitan area. A distinguishing feature of this paper was more detailed demographic information on subsidy recipients, such as average years of education and average number of children.

Two studies in Alabama, developed by Greisinger, Chipty, and Witte (1997), differed from one another by number of counties and period of time. "Parents Receiving Subsidized Child Care: Where Do They Work? A Study of Alabama's Labor Force" (Chipty & Witte, 1997) was a study of subsidy recipients over a five-year period in four counties. "Employment Patterns for Workers Receiving Subsidized Child Care: A Study of Eight Counties in Alabama" (Chipty & Witte, 1998) provided data analysis from a one-year period. While "Alabama's Labor Force" aggregated county data to conduct analyses, "Study of Eight Counties" analyzed each county's data separately.

The Oregon study, "Oregon's Parents Receiving Subsidized Child Care: Where Do They Work?" (Conway & Elliot, 1997) was unique in that state employment records were accessible and the study covered the entire state. The collaboration of two state agencies, Oregon Employment Department and Oregon Department of Human Resources (now Department of Human Services) enabled the researchers to expand the scope of the analysis by comparing employment patterns of subsidy recipients, other low-income families, and the overall labor force. In addition, the paper distinguished transitional and basic subsidy recipients.[2] Analysis was not done on the county level, only the state level.

In California, the California Child Care Resource and Referral Network examined employment patterns in four counties: Santa Clara, San Francisco, Tulare, and South Central Los Angeles. The California study examined a subset of subsidy recipients rather than all who received financial assistance in the four counties. California findings provide insight into important difference among types of subsidy recipients.

The Washington DC study, "District of Columbia Parents Receiving Subsidized Child Care: Where Do They Live & Work?" (DC Agenda & the Urban Institute, 1999), added another dimension to the existing study. In addition to the analysis of the sectors where subsidy recipients work, the authors used geocoding to conduct a spatial analysis, following Queralt and Witte (1998). They identified subsidy recipients' home and work locations as well as the locations of child care providers.[3]

[2] Transitional recipients are those who received a child care subsidy and a cash grant in the past 12 months, and basic recipients are those who received a child care subsidy and did not receive a cash grant in the past year.

[3] Appendix F (Employer Study Guidebook) shows a map of employment location of subsidy recipients.

Methodology

As noted earlier, the basic methodology used in the seven studies was designed by Lee et al. (1996) Although each study has unique features and/or original extensions, the basic methodology is the same. The experience of the Child Care Policy Research Consortium has reinforced the importance of comparisons across geographic areas. Comparable methods are key to the validity of comparisons. The value of a finding or findings of a study are enhanced when one can make comparisons to other counties and other states. This section addresses issues related to selection of the data, its analysis, and enhancements to the basic methodology added in later studies. Appendix F contains a guidebook for use by anyone who would like to produce a study whose findings can be compared with findings from the other studies.

Data selection

In the first step of the employer study, researchers determined the time period of the study; records from a single month, multiple months or years. In Alabama and Florida employment data were available for a multi-year period. The first Florida study (Lee et al., 1996) had data for four years, from 1992 to 1995, whereas the second Florida study (Griesinger et al., 1997) used data taken from a one-month period. In Oregon, the data covered a three-month period and in California the data captured a one-month period.

The employer study required a minimum of four types of data: subsidy data, employment data for persons using the program subsidy or the Unemployment Insurance Wage Reporting records, industrial codes for each employer (North American Industrial Classification System [NAICS] codes or Standard Industrial Codes, known as SIC codes), and employment data for the overall labor force. The SIC codes, which were last revised in 1987, are being replaced by the NAICS codes, and the official 1997 US NAICS Manual was published in 1997.[4] The original employer papers used the SICs because the NAICS codes were not in effect. However, the translation between the two codes is possible by using a conversion table.[5] We use the SIC codes in our discussion of the past studies. In Appendix F, in which we present more detailed methodology for future research, we use the NAICS codes.

Except for California, samples included all parents enrolled in the subsidy program in the given geographic area. Findings can be generalized to parents using a child care subsidy in that county or state. In California, since the researcher used data from only the three California Department of Education funded programs, you can generalize only to low-income working parents using child care subsidies outside the welfare system.

Data analyses

Researchers linked subsidy and employment records. In Florida, Alabama, California, and Washington DC, the place of employment included in the subsidy record was used. The challenge for the researcher in that case was to identify the industrial sector in which that employment was located so that parents could be sorted into standard employment categories. Numerous strategies were used, including a time-intensive process of assigning individual employers a SIC code through use of Select Phone, a CD ROM "telephone directory" (Griesinger et al, 1996; Chipty et al, 1997; Chipty et al., 1998; California Child Care Resource and Referral Network 1998). In Oregon the use of the Unemployment Insurance Wage Reporting database provided a SIC code for each parent enrolled in the subsidy program. With the exception of Oregon, the names of employers in which subsidy recipients were employed were included.

Once each subsidy recipient was linked to an industrial code, researchers identified employment patterns of these low-income workers. Researchers then compared the employment patterns of workers receiving subsidy with those of the overall

[4] The NAICS codes contain more industry classifications and have more detailed services industries categories. In addition, the codes were developed in cooperation with Canada and Mexico, facilitating cross country comparisons of industries. See footnotes in Appendix F for more details.

[5] The matching or conversion between the SIC and NAICS codes can be done online and interactively at http://www.census.gov/epcd/www/naicstab.htm, or you can download a conversion table from the page. For details, see http://www.census.gov/epcd/www/naics.html and http://www.ntis.gov/product/naics.htm.

labor force. This procedure allowed researchers to identify differences and similarities in the employment patterns of workers who receive a child care subsidy as compared to the overall workforce. The Washington DC study used D&B MarketPlace CD (Dun & Bradstreet, 1998), the Oregon study used Oregon Population Survey for 1994, and most of the other studies used USA Counties (Bureau of Census, various years) to identify employment patterns of the overall labor force.

Enhancements to the basic methodology

Subsequent researchers added to the methodology developed by Lee et al. (1996) by incorporating information obtained from additional data sources. For example, Oregon researchers were able to include earnings data from the Unemployment Insurance Wage Reporting records and findings from the Oregon Population Survey, a representative survey of Oregon households. The Washington DC study used new Geographic Information Systems (GIS) software to conduct a spatial analysis of employment, residence of subsidy recipients, and location of child care providers.

Summary of methodology and data from the seven studies

Table 1 displays the primary data sources of the studies. Table 2 describes the samples in each study. The sample sizes varied from 1,491 in the California study to 16,987 in the Alabama study. Those studies that used data collected over a longer period had the largest samples.

Table 3 shows some of the distinct features of the seven studies. Except for the Oregon study (Conway & Elliot, 1997), the first Alabama study (Chipty & Witte, 1997), and the DC study, the analysis was done at the county level.

Table 1: Data sources of the seven studies

Name of the Study	Study Published	Subsidy Data	Employer	Employer's Industrial Sector	Overall Employment
Florida (Initial)	1996	Subsidy records maintained by child care managing agencies	Parent interview with a counselor	Select Phone, "telephone book" on CD ROM	1994 County and City Data Book; USA Counties 1994
Florida (Dade)	1997	Subsidy records maintained by child care managing agencies	Parent interview with a counselor	Select Phone, "telephone book" on CD ROM	USA Counties 1994
Alabama (Four Counties)	1997	Subsidy records maintained by child care managing agencies	Parent interview with a counselor	Select Phone, "telephone book" on CD ROM	USA Counties 1996
Alabama (Eight Counties)	1998	Subsidy records maintained by child care managing agencies	Parent interview with a counselor	Select Phone, "telephone book" on CD ROM	USA Counties 1994
Oregon	1997	Client records from Adult and Family Services; unemployment insurance records	Unemployment Insurance Wage Reporting records	Unemployment Insurance Wage Reporting records	Oregon Population Survey 1994
California	1998	Records collected by CCRR Network	Parent interview with a counselor	Select Phone, "telephone book" on CD ROM	USA Counties 1996
Washington DC	1999	Subsidy records maintained by child care managing agencies	Subsidy records	Subsidy records	D&B MarketPlace, business information on CD ROM

Table 2: Characteristics of the samples in the seven studies				
Name of the Study	**Number of Counties**	**Population of the Geographic Area**	**Time Period**	**Sample Size**
Florida (Initial)	9	2,361,922[a]	1992–1995	11,396
Florida (Dade)	1	2,107,360[a]	July 1996	3,916
Alabama (Four Counties)	4	893,726	1992–1997	16,987
Alabama (Eight Counties)	8	1,216,626	June 1996–May 1997	4,322
Oregon	Entire State	3,127,000	1st quarter 1996	5,325
California	4[b]	11,838,976[c]	March 1997	1,491
Washington DC	N.A.	560,000	December 1998	2,368

[a] Calculated from the Census data downloaded from http://www.census.gov/population/www/estimates/co_cas.html
[b] The data cover all of the three counties and the south central part of Los Angeles County.
[c] Calculated from the Census data. Population total of the four counties includes the areas excluded from the analysis, i.e., parts of Los Angeles County that were not included in the study.

Table 3: Distinct features of the seven studies		
Study Area	**Description**	**Distinct Features**
Florida (Initial)	Duval, Pinellas, Big Bend Area	• Groundbreaking study • Contained names of major employers • Used in development and support of legislation that created a public/private child care subsidy initiative
Florida (Dade)	Dade	• Used socio-demographic data • Included large numbers of Haitians and other Spanish speakers
Alabama (Four Counties)	Four Counties	• Examined stability of employment patterns over time
Alabama (Eight Counties)	Eight Counties	• Data from eight counties broken down in order to avoid the dominance of Jefferson County • Included rural areas • Found urban and rural differences • Included populations that were predominantly white and others that were predominantly Afro-American
Oregon	Entire State	• Used Unemployment Insurance Wage Reporting records • Compared employment patterns of subsidy recipients with those of other low income workers • Compared employment patterns of transitional child care subsidy recipients with those of other recipients • Compared average wages of subsidy recipients with those of overall labor force
California	Four Counties	• Focused on subset of subsidy recipient • Found distinctive employment patterns • Led to an employer-supported child care initiative
Washington DC	District	• Used geocoding and examined locations of residences, work places of low-income workers and child care providers

Findings

Findings are based on analyses of subsidy recipients' employment patterns in major industries. The first of the five major findings emerges when we look at broadly defined industries: retail; services; manufacturing; public administration; finance, insurance, and real estate; wholesale trade; transportation; construction; communication; agriculture; and other.[6] The second and third findings focus on retail and services industries, the two most important industries for subsidy recipients, and provide more detailed analyses.

The remainder of this section presents the following findings:

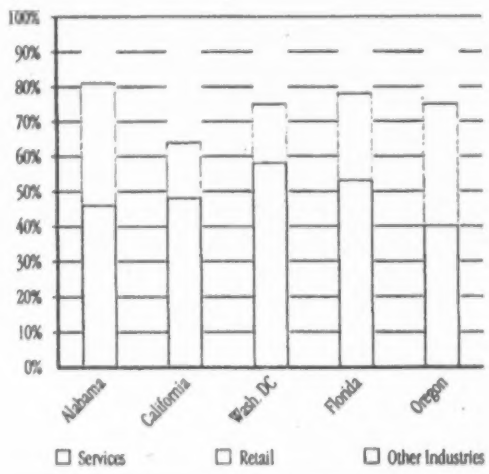
1. the retail and services industries employ the majority of subsidy-receiving workers,
2. the retail industry is the most common employer in each geographic area studied,
3. industries that are broadly classified as services industries are the second most common employers,
4. the employment pattern of subsidy-recipients and that of the overall labor force are quite different, and
5. local labor market conditions determine the size and importance of industries other than retail and services industries.

The consistency in subsidy recipients' employment patterns across a diverse set of states is striking. Cross-state similarities and differences add to our understanding of employment of low-wage employees with child care subsidies.

Cross-state similarities 1: Retail and services industries as major employers of subsidy recipients[7]

The preponderance of employment in the retail and services sectors occurs in all states, as shown in Figure 1.

Workers receiving subsidy: By sector and state
Figure 1



Almost three-quarters of subsidy-receiving workers are employed in these two industries in three states and the District of Columbia: Alabama, Florida, Oregon, and Washington DC. The proportion is the lowest for workers in California, where only 64 percent of subsidy recipients in the state are employed in the two industrial sectors.

Minnesota, not a part of the Consortium at the time, studied employment of subsidy receiving families using a different methodology. Findings from two Minnesota studies (Schlick & Zaffiro, 1996; Schlick, Daly, & Bradford, 1999) are based on surveys of those receiving subsidy in the first, and of those on the subsidy waiting list in the second. They found rates of employment in services and retail similar to those found in California.

[6] These broadly-defined industrial categories are shown in Table 5, and more-detailed, 2-digit SIC codes are listed in Appendix D.

[7] Findings presented in this section were identified by participants at the Researchers' Roundtable and the charts are partly based on a spreadsheet made by Ann D. Witte. Participants at the Researchers' Roundtable were Patricia L. Divine, Janis Elliot, Arthur Emlen, Magaly Queralt, Karen Tvedt, Bobbie Weber, Ann Dryden Witte, and Wendy Woods.

We thought it important to explore why California and Minnesota findings differed from the findings from the other studies. One possible reason for different findings relates to sample. In both California and Minnesota, families working with the TANF agency are not in the group studied.

In California the sample did not include families receiving child care subsidies from the welfare agency, and in Minnesota the Child Care Sliding Fee Child Care Program does not serve families with open cash assistance grants. The subsidy programs in the other states do include families who also have open cash assistance grants. In Ramsey County (Minneapolis) approximately half of the 2,300 families served by the Child Care Sliding Fee Program were surveyed (Schlick & Zaffiro, 1996) regarding a number of employment-related questions including the industrial sectors in which they worked. Forty-four percent were employed in services and 17 percent in trade (both wholesale and retail); 61 percent in the two sectors. In 1999, Schlick and fellow researchers (Schlick, Daly, & Bradford, 1999) surveyed a representative sample of 270 of the 1,200 families on the waiting list for the subsidy program and included questions about employment sector. They found 43 percent employed in services and 20 percent in trade; 63 percent in the two sectors. Findings of 61 percent in the first Minnesota study, 63 percent in second Minnesota study, and 64 percent in California, contrast with the finding of 75 percent or greater employed in the two sectors, services and retail, in the other studies. The differences in findings regarding employment of child care subsidy families in California and Minnesota may mean that there are subsets of subsidy recipients with differing employment patterns. A question worth pursuing is whether employment of parents varies by their proximity to a cash assistance grant.

The services sector includes personal, business, health, professional and social services. When we aggregate the subcategories of the services sector, we can see that the sector employs the largest number of subsidy recipients. In the studies that do not aggregate subcategories within the services sector, the retail industry provides the primary source of employment for workers receiving subsidies. Jobs in retail and services industries generally offer low wages and require few skills. This point and its implications will be discussed further in the next section.

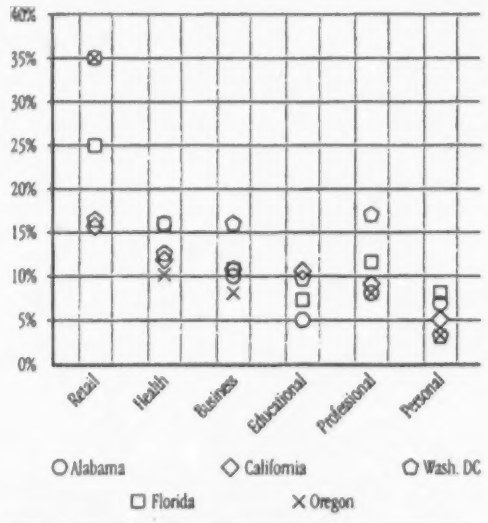
Cross-state similarities 2: Importance of the retail industry

As noted earlier, the importance of the retail industry becomes clear when we disaggregate the services sector. Figures 2 and 3 show the proportion of subsidy-receiving workers in retail and/or specific services industries for four states and the District of Columbia. Each mark represents the percent of subsidy recipients working in each sector. For example, approximately 35 percent of the low-income parents receiving subsidies work in the retail industry in Oregon and Alabama.

The retail industry employs between 25 percent and 35 percent of the workers receiving child care subsidies in Alabama, Oregon, and Florida. In California and Washington DC, the percentages of subsidy recipients working in the retail industry are 16 percent and 17 percent, respectively. Both Washington DC and the counties included in the California study are primarily urban areas, which may explain the lower percentages in the two areas. Indeed, the percentage of the workers employed in the retail industry in the second Florida study, which focused on Dade County, is 20 percent, 5 percent lower

Workers receiving subsidy:
Retail and individual service industries

Figure 2



Note: Oregon did not break out percentage employed in the educational sector.

than the state average based on all of the Florida counties studied as shown in Figure 2.

The retail sector includes hardware, general merchandise, department, food, apparel and home furniture stores, and eating and drinking places. The percentage of workers in the retail industry is higher than that of workers in any of the services industries in all four states. The role of the retail sector is especially prominent in Alabama and Oregon. In Alabama the retail industry employs more than twice as many subsidy recipients as the health services industries (35 vs. 16 percent).

Cross-state similarities 3: Importance of the services industry

As shown in Figure 1, the services sector as a whole is the largest employer of subsidy recipients. Both the patterns and the variation are important to our understanding. Health services include hospitals, nursing homes, offices, laboratories, clinics, outpatient services, home health aid and other health services. Business services encompass automotive services, temporary personnel agencies, cleaning services, security services and other business services. Professional services include social services and they are the most diverse of the services sectors. Services under this classification comprise legal services, social services, museums, membership organizations, engineering, accounting, research, management services and workers employed by private households.

Figure 3 shows the breakdown of the services sector by state. Although there is a slight variation across states, employment in health services has the largest number of subsidy-receiving employees within the services sector, except in Washington DC. In California, the percentages of subsidy-receiving workers in health, business and educational services are very close, at around 10 percent of all workers receiving subsidies. In Alabama, on the other hand, the percentage of subsidy-receiving workers is the highest for health services (16 percent) and the lowest for educational services (5 percent).

Considering the special nature of the District, distinctly different employment patterns in Washington DC are reasonable. The proportions of workers employed in business and professional services are almost twice the average found in the other studies.

Cross state similarities 4: Different employment pattern between subsidy recipients and overall labor force

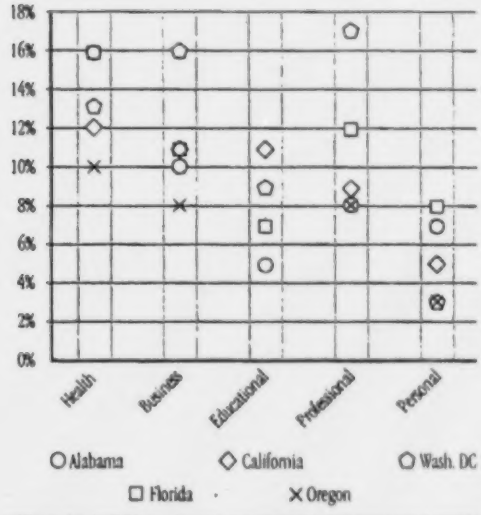
The employment pattern of subsidy recipients is quite different from that of the overall labor force. Figures 4 and 5 show the percentage of workers employed in the industry as a percentage of the total number of workers in each category. As shown in the figures, workers receiving child care subsidy are more likely to work in retail and services industries in all areas studied. In particular, the retail industry employs almost twice the percentage as the overall labor force in Alabama, Oregon, and Washington DC. Subsidy recipients are more likely to be employed in the services industry sectors in all areas studied.

Local variation: Effects of local labor market conditions

Within the services and manufacturing industries, local labor market conditions determine which specific types are most important. This point becomes clear when we look at em-

Workers receiving subsidy: Breakdown of services by state

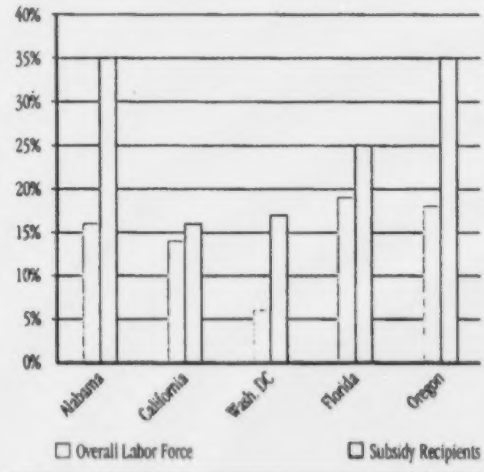
Figure 3



Note: Oregon did not break out percentage employed in the educational sector.

Comparison of employment pattern between subsidy recipients and overall labor force: Retail industry

Figure 4



ployment patterns at the county level. As shown in Table 4, we see local variation in Alabama and Florida, where we observe county-level differences for all parents receiving child care subsidies.

Furthermore, there appear to be rural and urban differences. Figure 6 shows employment pattern of workers receiving child care subsidies in two rural counties (Hale and Marengo in Alabama) and in two urban counties (Dade in Florida and Jefferson in Alabama).

Dade and Jefferson counties are urban areas encompassing Miami and Birmingham, while Hale and Marengo counties are rural. Differences between findings in rural and urban counties are striking. Almost 50 percent of subsidy recipients work in the services sector in Dade and Jefferson counties, whereas only 25 percent of subsidy recipients work in services in the rural counties. Table 5 shows more detailed breakdown of the place of work of subsidy recipients for the four counties listed above. Urban workers are more concentrated in the services industries. Rural subsidy-receiving workers are more likely to work in the manufacturing industry than are urban subsidy-receiving workers. A higher percentage of workers employed in manufacturing appears to be an indication of availability of non-services/retail industries in the area. Retail trade and services industries are important in each county. This finding, however, may be specific to the south.

Comparison of the employment pattern and wage rates between workers receiving subsidy and other low-wage workers: Oregon study

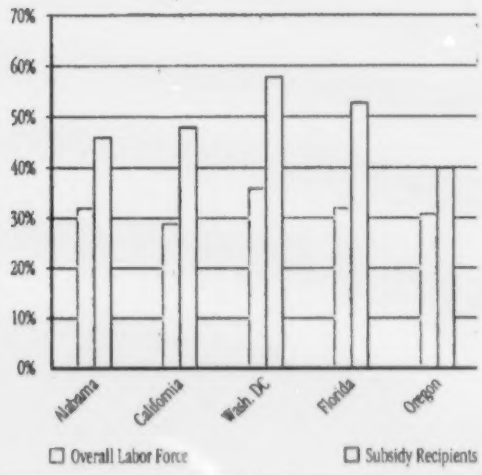
The Oregon researchers (Conway & Elliot, 1997) analyzed two additional aspects that had not been discussed in previous studies: comparison of employment patterns and wage rates between subsidy recipients and poor workers.

The authors compared the employment patterns of workers receiving child care subsidy and the poorest fifth of Oregon's wage earners. Their analysis revealed some noticeable differences in the employment patterns of the two groups of poor workers. Both retail and services industries are major employers of those workers; however, the poorest-fifth workers are more than twice as likely to work in the services industry than in the retail industry, whereas workers receiving subsidies are almost equally distributed between the two industries.

The analysis of wage rate of subsidy recipients showed that workers receiving subsidies employed in manufacturing, wholesale trade and finance, insurance, and real estate industries were paid higher wages than those employed in other sectors. Furthermore, the wage rates were lowest for those employed in retail trade, services, agriculture, forestry and fishery.

Comparison of employment pattern between subsidy recipients and overall labor force: Services industry

Figure 5



Workers receiving subsidy: Rural-urban differences

Figure 6

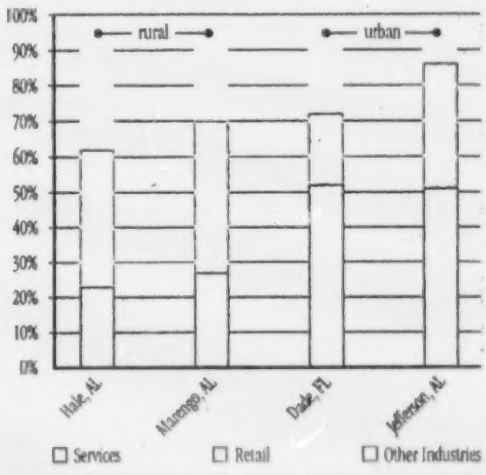


Table 4: The second highest SIC after retail					
State	County	Health Services	Business Services	Professional Services	Manufacturing
Alabama	Blount				O
	Jefferson	O			
	Shelby		O		
	Walker	O			
	Hale				O
	Marengo				O
	Madison			O	
	Houston	O			
Florida	Dade			O	
	Duvall		O		
	Pinnellas	O			

Table 5: Workers receiving subsidy in four counties (Breakdown by service sector)					
State		Alabama	Alabama	Florida	Alabama
County		Hale	Marengo	Dade	Jefferson
Retail		39%	43%	20%	35%
Services	Health Services	16%	14%	11%	15%
	Business Services	1%	1%	10%	14%
	Educational Services	0%	1%	10%	6%
	Professional Services	6%	7%	15%	7%
	Personal Services	0%	4%	8%	9%
Manufacturing		37%	23%	5%	2%
Public Administration		0%	2%	6%	3%
Finance, Insurance, and Real Estate		0%	0%	4%	5%
Wholesale Trade		1%	5%	4%	3%
Transportation		0%	0%	3%	1%
Construction		0%	0%	1%	0%
Communication		0%	0%	2%	1%
Agriculture		0%	0%	0%	0%
Other		0%	0%	1%	1%

Areas for further research

Research in this area has just started. There is much more to be learned. Future studies can broaden the scope and depth of our understanding of this important issue by extending the model presented in this paper in several ways. We will benefit from more detailed information from the Unemployment Insurance wage records (UI wage records) and subsidy records, such as shifts, part-time/full-time, stability, cyclical trends, and percent subsidized. Analysis of occupational categories available in the UI wage records will add important information to knowledge of the sectors in which these parents are employed. Longitudinal studies will help us understand the effectiveness of subsidy programs in guiding parents towards more sufficient wages and more stable environments.

Differences in employment patterns related to proximity of the parent to welfare receipt is an area that needs further study. One possible explanation for the different employment patterns of child care subsidy-receiving workers in California and Minnesota and the same workers in other states is proximity to receipt of welfare. The California and Minnesota samples did not include all parents receiving child care subsidies, while all other samples included all families receiving child care subsidies in the geographic areas studied. In the Oregon analysis, parents were divided based on proximity to welfare receipt and few differences in employment patterns were found. Further study of the relationship of proximity to welfare and type of employment will increase our understanding of employment of low-income workers with chil[illegible]

We need more understanding of loca[illegible]rences. In those studies in which we had county level data we found different employment patterns. It also appears that there are rural/urban differences in types of employment. It is important for advocates and policy administrators to know if these patterns exist elsewhere. Whenever possible, analysis at the county level will increase understanding of local differences.

Implications

The child care subsidy program affects many community sectors, including employers, child care providers, economic development planners, and policymakers. The findings of the employer studies make the link between the subsidy program and other initiatives more concrete and the case for support of the subsidy program more compelling.

Beneficiaries of child care subsidies

Obviously, recipients of subsidy and their children benefit from a child care subsidy. Children benefit from child care subsidies because parents have increased choice in care arrangements due to increased purchasing power. Although low-income parents have limited access to child care, receipt of a child care subsidy gives parents access to child care options which meet their own and their child's needs.

However, beneficiaries of subsidy are not limited to those who receive a subsidy. Employers, child care providers, and policy makers also benefit from child care subsidies in the following ways: (a) child care subsidies bring individuals into the pool of available workers; (b) child care support stabilizes low-income workers and children; (c) employers may gain lower absenteeism and turnover rates by employing subsidy recipients; and (d) lower absenteeism and turnover rates, in turn, directly increase productivity by reducing costs, such as those associated with recruitment and training.

Child care providers benefit from child care subsidy in several ways. The most obvious is the increased demand for their services. Availability of child care subsidy has increased the number of children in paid care and the business need for more providers.

Employers and child care providers may not know how the subsidy program benefits them. One use of these studies is to help employers and others see how their objectives are supported by the child care subsidy program.

Nontraditional hours

Retail and services industries operate long hours and workers in those industries often work in shifts, requiring employees to search for child care in the evenings and/or during weekends. Nontraditional work schedules, common in retail and services industries, create a number of issues. For parents, providers, and child care policy makers, child care needs during the nontraditional-hours are a challenge. Employer policies that take the child care needs of employees into consideration contribute to employee success. Some caregivers can increase their flexibility in order to meet these needs, but it is not economically feasible for others to do so. Child care policy makers must examine how policies can support low-income workers employed during nontraditional hours; specifically how policies can increase options and improve quality.

Employment stability

The volatility of industries in which many subsidy recipients work affects workers, their families, employers and policy makers. The retail trade industry, which employs the largest number of subsidy recipients, is highly volatile and susceptible to changing business environments. Closure of an establishment or layoffs of workers not only affects financial conditions of workers but also has a negative impact on a local economy. Given the high levels of employment of subsidy recipients in these industries, policy makers and subsidy administrators need to pay particular attention to business conditions of retail and services industries.

Wage enhancement and job retention

Workers staying employed benefit both employers and employees. To the extent that receipt of a child care subsidy enables workers to stay at the same establishment (by making stable child care more affordable), those workers have a higher probability of acquiring job-related skills. At the same time, the industry sectors in which most subsidy-receiving workers are employed are characterized by low-wage jobs. The potential for wage enhancement within these industries is limited, as are opportunities to learn skills that lead to positions paying higher wages. Policies that support workers enhancing their skills while employed in these sectors are crucial to long-term success for individuals and for efforts designed to support self-sufficiency.

Conclusion

This paper summarizes the methodology and research findings of seven studies focusing on employment patterns of workers receiving child care subsidies. Lee, Ohlandt, and Witte (1996) developed the methodology and conducted the first research on this subject and six other papers, examining employment pattern of subsidy recipients in Alabama, California, Florida, Oregon and the District of Columbia, were produced through the collaborative work of the Child Care Policy Research Consortium.

The importance of understanding employment of parents receiving a child care subsidy increases in a welfare reform era. TANF caseloads between 1996 and 2000 have decreased by 50 percent.[8] Low-income workers have special issues related to where they work.

The studies reveal common employment patterns of parents who work while receiving child care subsidies. The most notable pattern is the concentration in retail and services industries; those two sectors employ between 65 percent and 85 percent of low-income workers who receive child care subsidies. Moreover, the importance of these two sectors does not vary across states or counties, while the next important sector is determined by conditions of local economies. Employment patterns of workers receiving subsidy are different from those of the general labor force. Workers receiving child care subsidy are more likely to be employed in retail and services industries than are other workers.

Most jobs in retail and services sectors pay low wages and require low skills. Parents working in these sectors have to face scheduling difficulties because jobs in retail and services sectors involve shift work. Nontraditional shifts increase demand for nontraditional-hour child care. For parents receiving child care subsidies to move beyond poverty wages, they need to acquire additional skills while remaining employed and may need to move to another sector where there are more, higher-paying jobs.

Employers, child care providers, and other public initiatives benefit from the child care subsidy program. Findings from these seven studies not only clarify patterns of employment but also reveal links between the subsidy program and the objectives of employers, child care providers, and other public initiatives. Most importantly, increased understanding of where these low-income parents work supports efforts to better serve working parents and their children.

[8] *http://www.acf.dhhs.gov/news/stats/aug-dec.htm*

References

Bureau of Census, U.S. Department of Commerce. (Various years). *USA counties.* Washington, DC: US Government Printing Office.

California Child Care Resource and Referral Network. (1998). Parents receiving subsidized child care in California: Where do they work? San Francisco, CA: Author.

Chipty, Tansneem & Ann Dryden Witte. (1997). *Parents receiving subsidized child care: Where do they work? A study of Alabama's labor force* (Ohio State University working paper). Columbus, OH: State University.

Chipty, Tansneem & Ann Dryden Witte. (1998). *Employment patterns of workers receiving subsidized child care: A study of eight counties in Alabama.* Birmingham, AL: Author.

Conway, Bryan & Janis Sabin Elliot. (July, 1997). *Oregon's parents receiving subsidized child care: Where do they work?* (Oregon Employment Department reprint). Salem, OR: Employment Department.

DC Agenda & the Urban Institute. (1999). *District of Columbia parents receiving subsidized child care: Where do they live & work?* Washington, DC: Authors.

Dun & Bradstreet (1998). *D&B MarketPlace CD*, Dun & Bradstreet, April-June, 1998.

Griesinger, Harriet E., Tasneem Chipty, & Ann Dryden Witte. (1997). *Employment of parents receiving subsidized child care in Dade County, FL.* (Wellesley College working paper). Wellesley, MA: Wellesley College.

Lee, Christine, Stephanie Ohlandt, & Ann Dryden Witte. (1996). *Parents receiving subsidized child care: Where do they work?* Tallahassee, FL: Florida Children's Forum.

Queralt, Magaly, & Ann Dryden Witte. (1998). *A map for you? Geographic information systems in the social services*, Social Work, Vol. 43, No. 5 (September 1998).

Shlick, Deborah, Mary Daly, & Lee Bradford. (1999) *Faces on the waiting list: Waiting for child care assistance in Ramsey County.* St. Paul, MN: Ramsey County Human Services.

Shlick, Deborah, & J. Zaffiro. (1996) *The other side of the child care study: Economic development trends and the need for child care subsidies.* St. Paul, MN: Ramsey County Human Services.

Appendix A
Funders

Alabama

- Childcare Resources
- Alabama Power Foundation Inc.
- The Caring Foundation
- Protective Life Foundation
- Sonat Foundation
- Tri-State Child Care Research Partnership
- Brandeis University
- Florida International University
- Ohio State University
- Wellesley College

California

- The David and Lucile Packard Foundation
- The California Child Care Resource and Referral Network

Florida (Griesinger, Chipty, and Witte, 1997)

- Tri-State Child Care Policy Research Partnership of the Florida Children's Forum
- The Wellesley Child Care Research Partnership
- Child Care Policy Consortium, the Child Care Bureau, Administration for Children and Families
- Wellesley College

Oregon

- The Oregon Employment Department
- Adult and Family Services, Oregon Department of Human Resources (now Department of Human Services)
- The Child Care Bureau, Administration on Children, Youth, and Families

Washington, DC

- Office of Early Childhood Development, The District of Columbia Department of Human Services

Appendix B
Data Sources

Alabama (Chipty & Witte, 1997)

- The Chil' Care Management System (CCMS) subsidy databases
- Select Phone 1997 CD-ROM (Pro CD, Inc.)
- USA counties 1996 (U.S. Bureau of Census)

Alabama (Chipty & Witte, 1998)

- The Child Care Management System (CCMS) subsidy databases
- Select Phone 1996 CD-ROM (Pro CD, Inc.)
- USA counties 1994 (U.S. Bureau of Census)

California

- Employment data of Alternative Payment Program participants (The Children's Council of San Francisco, Community Coordinating Child Development Council of Santa Clara County, Tulare Country Office of Education: Child Care Services, Crystal Stairs, Inc.)
- Select Phone 1992-1997 (Pro CD, Inc.)

Florida (Lee, Oblandt, & Witte)

- Child Care Management System database (the Child Care Coordinating Agencies)
- 1994 County and City Data Book (U.S. Department of Commerce)
- USA Counties (U.S. Bureau of Census)

Florida (Griesinger, Chipty, & Witte)

- Employed recipients of child care benefits data (Metro-Dade Division of Child Development Services)
- Select Phone 1996 and Select Phone 1997 CD-ROM (Pro CD, Inc.)
- USA Counties 1994 CD ROM (U.S. Bureau of Census)

Oregon

- Employment Related Day Care client records (Oregon Department of Human Resources, now Department of Human Services)
- Oregon Population Survey (Oregon Employment Department)

Washington, DC

- Recipients of child care subsidies data (The Office of Early Childhood Development)
- 1998 MarketPlace CD-ROM (Dun & Bradstreet)

Appendix C
Tables

Table for Figure 1: Workers receiving subsidy and overall labor force: By sector and state					
	Alabama	**California**	**DC**	**Florida**	**Oregon**
Retail	35%	16%	17%	25%	35%
Services	46%	48%	58%	53%	40%
Other Industries	19%	36%	26%	22%	25%

Table for Figure 2: Workers receiving subsidy: Retail and services industries					
	Alabama	**California**	**DC**	**Florida**	**Oregon**
Retail	35%	16%	17%	25%	35%
Health Services	16%	12%	13%	16%	10%
Business Services	10%	11%	16%	11%	8%
Educational Services	5%	11%	9%	7%	N/A
Professional Services	8%	9%	17%	12%	8%
Personal Services	7%	5%	3%	8%	3%

Table for Figure 3: Workers receiving subsidy: breakdown of services by State
Same table as Figure 2 (except for retail)

Table for Figure 4: Comparison of employment pattern between subsidy recipients and overal labor force: Retail Industry					
	Percent Working in Retail Industry				
	Alabama	**California**	**DC**	**Florida**	**Oregon**
Overall Labor Force	16%	14%	6%	19%	18%
Subsidy Recipients	35%	16%	17%	25%	35%

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Table for Figure 5:
Comparison of employment pattern between subsidy recipients and overall labor force: Services industry

	Percent Working in Retail Industry				
	Alabama	California	DC	Florida	Oregon
Overall Labor Force	32%	29%	36%	32%	31%
Subsidy Recipients	46%	48%	58%	53%	40%

Table for Figure 6:
Workers receiving subsidy: Rural-urban differences

	Hale, AL	Marengo, AL	Dade, FL	Jefferson, AL
Retail	39%	43%	20%	35%
Services	23%	27%	52%	51%
Other	38%	30%	28%	14%

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Appendix D

Standard Industrial Classification Codes

Construction
15 Building Construction, General Contractors and Operative Builders
16 Heavy Construction other Than Building Construction Contractors
17 Construction Special Trade Contractors

Manufacturing
20 Food and Kindred Products
21 Tobacco Products
22 Textile Mill Products
23 Apparel and other Finished Products Made From Fabrics and Similar Materials
24 Lumber and Wood Products, except Furniture
25 Furniture and Fixtures
26 Paper and Allied Products
27 Printing, Publishing, and Allied Industries
28 Chemicals and Allied Products
29 Petroleum Refining and Related Industries
30 Rubber and Miscellaneous Plastics Products
31 Leather and Leather Products
32 Stone, Clay, Glass, and Concrete Products
33 Primary Metal Industries
34 Fabricated Metal Products, except Machinery and Transportation Equipment
35 Industrial and Commercial Machinery and Computer Equipment
36 Electronic and other Electrical Equipment and Components, except Computer Eq
37 Transportation Equipment
38 Measuring, Analyzing, and Controlling Instruments; Photographic, Medical
39 Miscellaneous Manufacturing Industries

Transportation
40 Railroad Transportation
41 Local and Suburban Transit and Interurban Highway Passenger Transportation
42 Motor Freight Transportation and Warehousing
43 United States Postal Service
44 Water Transportation
45 Transportation By Air
46 Pipelines, except Natural Gas
47 Transportation Services

Communications and Public Utilities
48 Communications
49 Electric, Gas, and Sanitary Services

Wholesale Trade
50 Wholesale Trade-Durable Goods
51 Wholesale Trade-Non-Durable Goods

Retail Trade
52 Building Materials, Hardware, Garden Supply, and Mobile

Home Dealers
53 General Merchandise Stores
54 Food Stores
55 Automotive Dealers and Gasoline Service Stations
56 Apparel and Accessory Stores
57 Home Furniture, Furnishings, and Equipment Stores
58 Eating and Drinking Places
59 Miscellaneous Retail

Finance, Insurance, and Real Estate
60 Depository Institutions
61 Non-Depository Credit Institutions
62 Security and Commodity Brokers, Dealers, Exchanges, and Services
63 Insurance Carriers
64 Insurance Agents, Brokers, and Service
65 Real Estate
67 Holding and other Investment Offices

Personal Services
70 Hotels, Rooming Houses, Camps, and other Lodging Places
72 Personal Services

Business Services and Repairs
73 Business Services
75 Automotive Repair, Services, and Parking
76 Miscellaneous Repair Services

Health Services
80 Health Services

Educational Services
82 Educational Services

Professional and Social Services (Other than Health and Education)
81 Legal Services
83 Social Services
84 Museums, Art Galleries, and Botanical and Zoological Gardens
86 Membership Organizations
87 Engineering, Accounting, Research, Management, and Related Services
88 Private Households
89 Miscellaneous Services

Public Administration
91 Executive, Legislative, and General Government, except Finance
92 Justice, Public Order, and Safety
93 Public Finance, Taxation, and Monetary Policy
94 Administration of Human Resource Programs
95 Administration of Environmental Quality and Housing Programs
96 Administration of Economic Programs

Other
1 Agricultural Production Crops
2 Agriculture Production Livestock and Animal Specialties
7 Agricultural Services
8 Forestry
9 Fishing, Hunting, and Trapping
10 Metal Mining
12 Coal Mining
13 Oil and Gas Extraction
14 Mining and Quarrying of Nonmetallic Minerals, except Fuels
78 Motion Pictures
79 Amusement and Recreation Services
97 National Security and International Affairs
99 Nonclassifiable Establishments

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Appendix E

Two- and Three-Digit North American Industry Classification System Codes

11 Agriculture, Forestry, Fishing and Hunting
111 Crop Production
112 Animal Production
113 Forestry and Logging
114 Fishing, Hunting and Trapping
115 Support Activities for Agriculture and Forestry

21 Mining
211 Oil and Gas Extraction
212 Mining (except Oil and Gas)
213 Support Activities for Mining

22 Utilities
221 Utilities

23 Construction
233 Building, Developing, and General Contracting
234 Heavy Construction
235 Special Trade Contractors

31–33 Manufacturing
311 Food Manufacturing
312 Beverage and Tobacco Product Manufacturing
313 Textile Mills
314 Textile Product Mills
315 Apparel Manufacturing
316 Leather and Allied Product Manufacturing
321 Wood Product Manufacturing
322 Paper Manufacturing
323 Printing and Related Support Activities
324 Petroleum and Coal Products Manufacturing
325 Chemical Manufacturing
326 Plastics and Rubber Products Manufacturing
327 Nonmetallic Mineral Product Manufacturing
331 Primary Metal Manufacturing
332 Fabricated Metal Product Manufacturing
333 Machinery Manufacturing
334 Computer and Electronic Product Manufacturing
335 Electrical Equipment, Appliance, and Component Manufacturing
336 Transportation Equipment Manufacturing
337 Furniture and Related Product Manufacturing
339 Miscellaneous Manufacturing

42 Wholesale Trade
421 Wholesale Trade, Durable Goods
422 Wholesale Trade, Nondurable Goods

44–45 Retail Trade
441 Motor Vehicle and Parts Dealers
442 Furniture and Home Furnishings Stores
443 Electronics and Appliance Stores
444 Building Material and Garden Equipment and Supplies Dealers
445 Food and Beverage Stores
446 Health and Personal Care Stores
447 Gasoline Stations
448 Clothing and Clothing Accessories Stores
451 Sporting Goods, Hobby, Book, and Music Stores
452 General Merchandise Stores
453 Miscellaneous Store Retailers
454 Nonstore Retailers

48–49 Transportation and Warehousing
481 Air Transportation
482 Rail Transportation
483 Water Transportation
484 Truck Transportation
485 Transit and Ground Passenger Transportation
486 Pipeline Transportation
487 Scenic and Sightseeing Transportation
488 Support Activities for Transportation
491 Postal Service
492 Couriers and Messengers
493 Warehousing and Storage

51 Information
511 Publishing Industries
512 Motion Picture and Sound Recording Industries
513 Broadcasting and Telecommunications
514 Information Services and Data Processing Services

52 Finance and Insurance
521 Monetary Authorities – Central Bank
522 Credit Intermediation and Related Activities
523 Securities, Commodity Contracts, and Other Financial Investments and Related Activities
524 Insurance Carriers and Related Activities
525 Funds, Trusts, and Other Financial Vehicles

53 Real Estate and Rental and Leasing
531 Real Estate
532 Rental and Leasing Services
533 Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)

54 Professional, Scientific, and Technical Services
541 Professional, Scientific, and Technical Services

55 Management of Companies and Enterprises
551 Management of Companies and Enterprises

56 Administrative and Support and Waste Management and Remediation Services
561 Administrative and Support Services

562 Waste Management and Remediation Services

61 Educational Services

611 Educational Services

62 Health Care and Social Assistance

621 Ambulatory Health Care Services
622 Hospitals
623 Nursing and Residential Care Facilities
624 Social Assistance

71 Arts, Entertainment, and Recreation

711 Performing Arts, Spectator Sports, and Related Industries
712 Museums, Historical Sites, and Similar Institutions
713 Amusement, Gambling, and Recreation Industries

72 Accommodation and Food Services

721 Accommodation
722 Food Services and Drinking Places

81 Other Services (except Public Administration)

811 Repair and Maintenance
812 Personal and Laundry Services
813 Religious, Grantmaking, Civic, Professional, and Similar Organizations
814 Private Households

92 Public Administration

921 Executive, Legislative, and Other General Government Support
922 Justice, Public Order, and Safety Activities
923 Administration of Human Resource Programs
924 Administration of Environmental Quality Programs
925 Administration of Housing Programs, Urban Planning, and Community Development
926 Administration of Economic Programs
927 Space Research and Technology
928 National Security and International Affairs

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Appendix F
Employer Study Guidebook

As noted in the study, the Child Care Policy Research Consortium has found that cross-county and cross-state comparisons add value to study findings. In making such comparisons, use of the same methodology increases the validity of the comparative findings. The following guidebook is included to enable others to conduct their own employer study. Our goal in adding this section is to provide a stand-alone, concise and concrete set of procedures to support study replication. We hope more states and counties will analyze the employment pattern of workers receiving child care subsidies.[1] Use of the same method will enable them to compare their findings with those of the other seven studies. Further, by sharing their findings, we can create a national picture of the employment of families either transitioning from or diverted from welfare and we can examine changes over time.

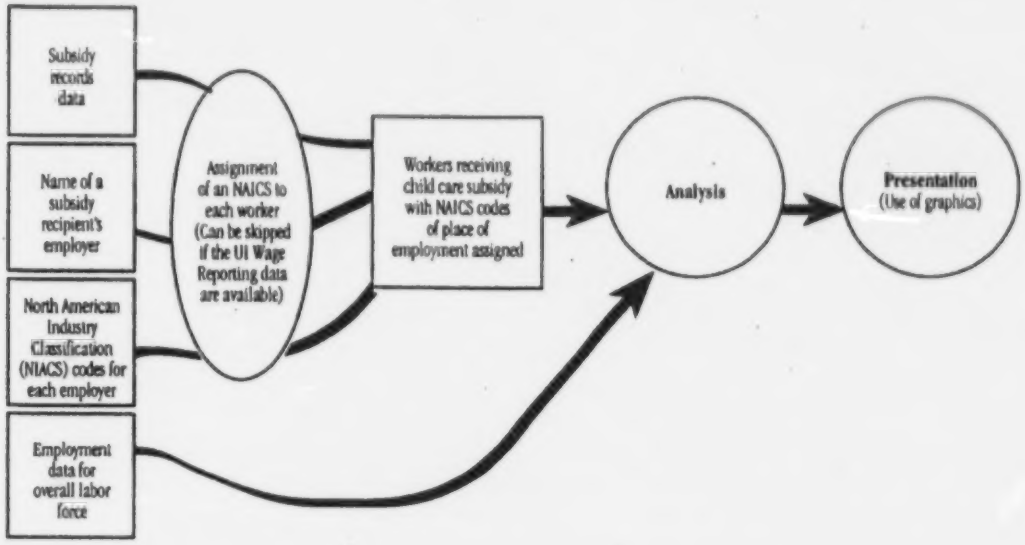
Figure F-1 illustrates a general procedure of conducting an employer study.

Data selection

The type of data available to a researcher influences the scope of a study. The objective at this stage is to collect subsidy records and subsidy recipients' place of employment so that we can assign a North American Industry Classification System (NAICS) code[2] to each worker receiving a child care subsidy. At this stage it is important to note who is and is not included in the data. Detailed description of the type(s) of subsidy programs operating in the geographic area helps. In some areas, subsidy programs are administered by a single agency and all recipients are in a single data set. In many areas, multiple agencies administer public child care subsidies and each agency works with a distinct population. It is recommended that the study include as much of the population of parents receiving child care as is possible, as exclusion of any set of parents may skew results. If not all can be included, then it is essential that the included and excluded subsidy populations be clearly described.

Overall procedure flowchart

Figure F-1


Subsidy records data
Name of a subsidy recipient's employer
North American Industry Classification (NIACS) codes for each employer
Employment data for overall labor force
Assignment of an NAICS to each worker (Can be skipped if the UI Wage Reporting data are available)
Workers receiving child care subsidy with NAICS codes of place of employment assigned
Analysis
Presentation
(Use of graphics)

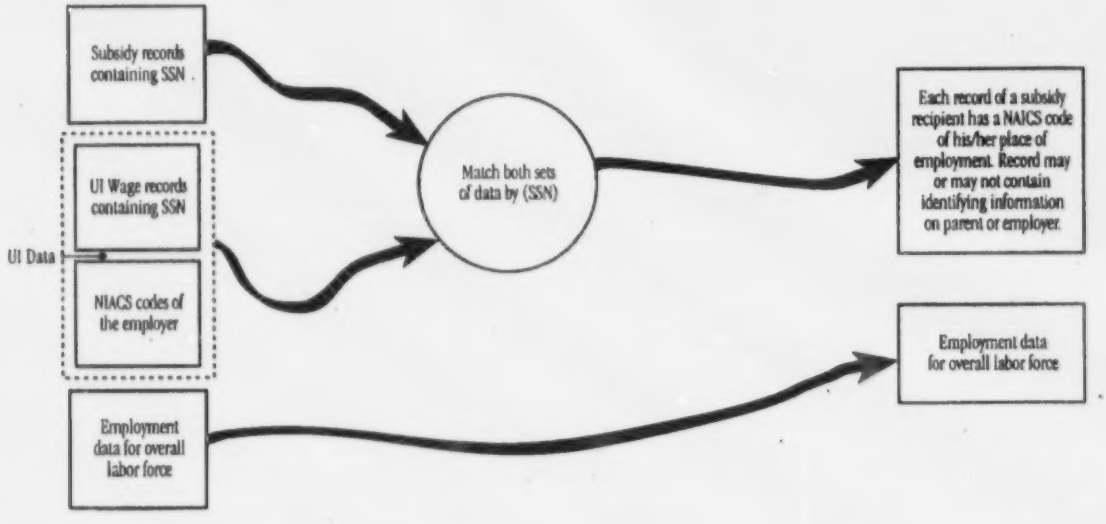
[1] *Template files for tables and figures are available for download at http://www.lbcc.cc.or.us/familyresources/researchpartner/templates.*

Note that there are two ways to assign NAICS codes to parents receiving child care subsidies. If a researcher can obtain the Unemployment Insurance (UI) Wage Reporting records, as in the Oregon study,[3] we can match subsidy records and the employment data by using Social Security numbers (SSN).[4] If the UI data are not available, we can use employer names, provided by a subsidy recipient during his/her interview with a subsidy eligibility counselor, and a CD-ROM telephone book to assign NAICS codes to workers receiving child care subsidies. Since the UI records are official data and already contain NAICS codes, using them is preferable to relying on names of employers obtained during parent intakes.

On another note, if the employment data from a longer period are available, a researcher needs to make sure that there is no double counting of the same person. One way to avoid double counting is to take the most recent interview record for each person as was done in Chipty and Witte (1997). Availability of data from a longer period enables researchers to conduct a longitudinal study; however, the analysis data for a longitudinal study must be constructed differently and research questions will be different. Therefore, this guidebook will not touch upon methodologies leading to a longitudinal study.

The remainder of this section summarizes required data, data selection criteria and detailed data sources. In addition to the data required to conduct a basic employer study, some data sources to enhance the basic study are also provided.

Overview of construction of the analysis data
Figure F-2


Subsidy records containing SSN
UI Wage records containing SSN
UI Data
NIACS codes of the employer
Employment data for overall labor force
Match both sets of data by (SSN)
Each record of a subsidy recipient has a NAICS code of his/her place of employment. Record may or may not contain identifying information on parent or employer.
Employment data for overall labor force

[2] As mentioned in the main part of the paper, NAICS codes were introduced in 1997, replacing the Standard Industrial Classification codes. If conversion between the two codes becomes necessary for comparative studies, you can refer to http://www.census.gov/epcd/www/naics.html.

[3] See Conway, B. and J. S. Elliot. (1997). Oregon's parents receiving subsidized child care: Where do they work? Adult and Family Services and the Oregon Employment Department reprint, July 11, 1997.

[4] The use of Social Security numbers is a sensitive issue, which may raise some concerns; however, it becomes necessary when matching administrative data from different sources. The Child Care Bureau sees the use of Social Security numbers for research purposes as "necessary." Nevertheless, researchers need to make sure that the Social Security numbers will not be disclosed to the public.

Data for basic analysis

CASE 1: UI Wage Reporting Records are available.

The UI data usually contain two data fields, employers' names and the NAICS codes, that are necessary for the study. You may also be able to bring in information on wages that would enhance your study. If using the UI Wage Reporting records, decisions need to be made about how to handle confidentiality of both parent and employer information. In Oregon, the decision was made to delete any identifying information on either. Although this was a confidentiality solution, it limited the utility of the study in terms of engaging employers in support of the subsidy program. Oregon could not identify the major employers of parents on subsidy as researchers did in the other studies.

- Subsidy records— Refer to the earlier section for necessary information and selection criteria.
- Employment data from the UI data— Refer to the earlier section for necessary information and selection criteria.
- Overall labor force employment data— Need to contain the number of workers by NAICS
  Note: It is desirable to be able to portion by income groupings.

CASE 2: UI Wage Reporting Records are NOT available.

Subsidy Records—Need to contain the employers' names so that a researcher can assign the NAICS codes by using a CD-ROM telephone book

- Subsidy record selection criteria— The data include all child care subsidy recipients or a representative sample of subsidy recipients in the area of study. If this is not possible, then describe the subset being used and how it differs from others receiving child care subsidies in the geographic area
- NAICS data— Need to contain the employers' names or another identifier that can be used to match records with those in subsidy records and the NAICS codes
- Overall labor force employment data— Need to contain the number of workers by NAICS
  Note: Desirable if can be portioned by income groupings

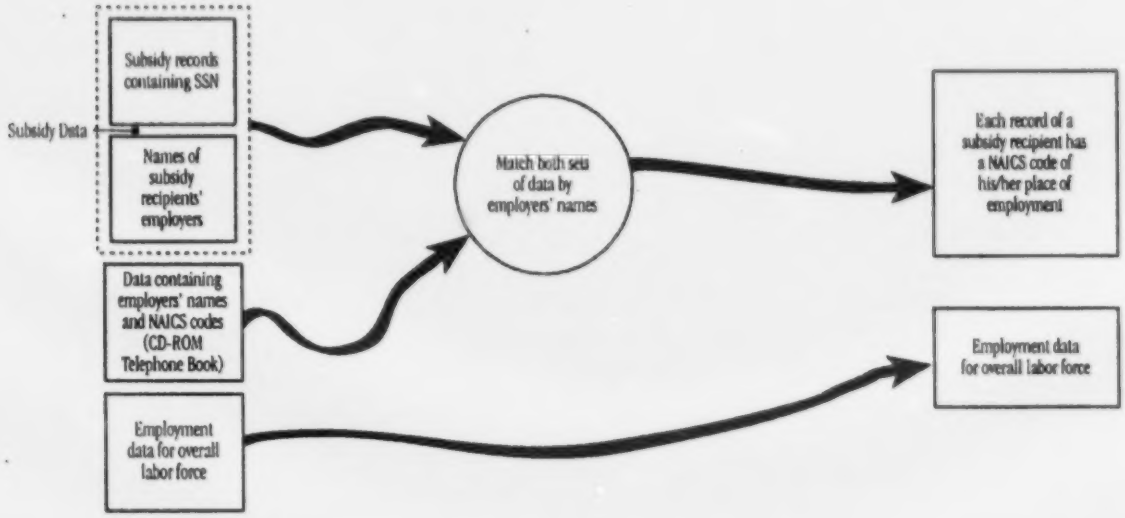
Data for further analysis

Additional data that enable a researcher to conduct more detailed analysis include the following.

- Demographic information of subsidy recipients including age, education level, marital status and race
- Demographic information of the population in the area studied
- Employment data of low-income parents not receiving a child care subsidy
- Location of residence, work and child care
- Panel data of subsidy recipients over a certain period of time
- Wage data for subsidy recipient
- Wage data for other low-wage workers in geographic area

Overview of construction of the analysis data

Figure F-3


Subsidy records containing SSN
Subsidy Data
Names of subsidy recipients' employers
Data containing employers' names and NAICS codes (CD-ROM Telephone Book)
Employment data for overall labor force
Match both sets of data by employers' names
Each record of a subsidy recipient has a NAICS code of his/her place of employment
Employment data for overall labor force

Data sources

The sources listed in this section are mostly taken from previous studies. A researcher may find data sources other than those described in this section. Since the quality of data affects the quality of the study, if the researcher finds better data from a different source, he/she is encouraged to use them.

- Child care subsidy records— Agencies administering child care subsidies
- The UI Wage reporting records— State employment department
- Employer data— Select Phone: Select Phone is a CD-ROM database containing telephone listings for individuals and businesses. The business listings include a field for the NAICS codes. University libraries often purchase it and make it available for library users.
- The North American Industry Classification System (NAICS) codes— Available in print, on a CD-Rom, or on the Internet. Order form and more information are provided at the U.S. Census Bureau web site: http://www.census.gov/epcd/www/naics.html. For more detailed information on NAICS codes, refer to Footnote 2.

Employment data for overall labor force— Several different sources are listed in this section.

- USA Counties: Available online at Government Information Sharing Project web site of the Oregon State University library at http://govinfo.kerr.orst.edu/usaco-stateis.html
- County and City Data Book: Available online at the Virginia Tech University library web site at http://fisher.lib.virginia.edu/ccdb/
- USA Counties General Profile and County Business Patterns General Profile: Available online at the Census Bureau's web site at http://www.census.gov/datamap/www/

Assigning NAICS codes to workers receiving a child care subsidy

Use Unemployment Insurance records or a telephone book database to assign a NAICS to an employer of a subsidy recipient. You can refer to Figure F-2 or Figure F-3, depending on the type of data you have.

Assignment of detailed codes are more desirable since they can be grouped together to obtain major industrial sectors. The most detailed classification of the NAICS has six digits. Two-digit SIC codes and three-digit NAICS codes are listed in Appendix D and Appendix E, respectively, and two-digit NAICS codes are listed in the next section of this guidebook.

Data analysis

Exploratory analyses

At this stage, a researcher has at least two data sets: one for subsidy recipients and the other for the overall labor force. In order to familiarize him/herself with the data and to exam-

Table F-1: Profile of sample

	County A	County B	County C	Total
Number of persons in sample				
Average monthly salary				
Median monthly salary				
Median age				
Percent White				
Percent Black				
Percent other non-white				
Percent female				
Average years of education				
Median years of education				
Percent single				
Percent married				

ine the accuracy of data and data manipulation process, it is a good idea to obtain descriptive statistics of the two data sets at this stage. If the analysis covers more than one county, then the profiles can be presented in a table similar to Table F-1.[5]

Other characteristics that can provide more detailed profile of workers receiving child care subsidies include: percent of families who speak language other than English at home, median number of children, median age of youngest child, mean number of children in household in child care, and mean monthly market cost of child care in dollars.[6]

Basic analysis: The first part of the analysis

Selection of industry classification and aggregation levels

The first task in conducting the main part of the analysis is to determine the degree of aggregation of different industries. The NAICS codes have up to six digits. The detailed industry classification can be collapsed into more aggregate levels depending on the purpose of the analysis.

Table F-2: Example of industrial classification

Retail	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers
	General Merchandise Stores
	Food Stores
	Automotive Dealers and Gasoline Service Stations
	Apparel and Accessory Stores
	Home Furniture, Furnishings, and Equipment Stores
	Eating and Drinking Places
	Miscellaneous Retail
Services	Health Services
	Business Services
	Educational Services
	Professional Services
	Personal Services
	Other Services
Manufacturing	
Public Administration	
Finance, Insurance, Real Estate	
Wholesale Trade	
Transportation	
Construction	
Communication	
Agriculture	
Other	

[5] *For details, see p. 40–41 of the Alabama's eight-county study.*

[6] *Griesinger et al. (1997), Employment of Parents Receiving Subsidized Child Care in Dade County, Florida, p. 17.*

Table F-2 shows a sample of the industrial classification used in previous studies.

Table F-3 shows two-digit NAICS codes used to construct tables according to the above classification. Please note that the NAICS uses three digits for the detailed retail-sector classification.

Percentages of subsidy-receiving and regular workers employed in each sector

The next task is to obtain the percentages of workers employed in each sector for both child-care-subsidy-receiving workers and overall labor force. The presentation of results will be most effective in graphics; however, the tables showing the results can be included in the appendix section of the paper.

Presentation of results

Uses of appropriate type of charts are essential for effective presentation of results. This section introduces some of the charts developed in previous studies.

The first chart we show is descriptive. It shows where workers receiving child care subsidies are employed. In Figure F-4, readers can clearly see that close to 50 percent of subsidy receiving parents are employed in the retail and health services industries.

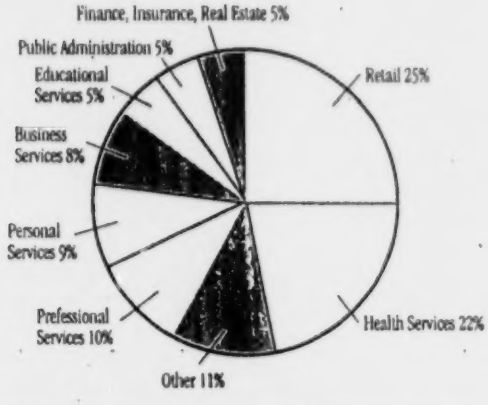
The next graph, Figure F-5, shows a comparison of employment patterns between workers receiving child care subsidies and overall labor force, the main results of the basic analysis. Since the height of each bar indicates the percentage of workers employed in a particular industry, the graph makes

Table F-3: Two-digit NAICS codes

NAICS Codes	NAICS Definition
11	Agriculture, Forestry, Fishing and Hunting
21	Mining
22	Utilities
23	Construction
31–33	Manufacturing
42	Wholesale Trade
44–45	Retail Trade
48–49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)
92	Public Administration

Employment by Industry of Workers Receiving Subsidiezed Child Care in Pinellas County, Florida

Figure F-4



Note: "Other" includes Agriculture, Forestry, and Fishing; Mining; Construction; Manufacturing; Transportation; Communication and Public Utility; Wholesale Trade; and Entertainment and Recreation Services.

Employment Comparison: Pinellas County's Overall Labor Force and Workers Receiving Subsidized Child Care

Figure F-5

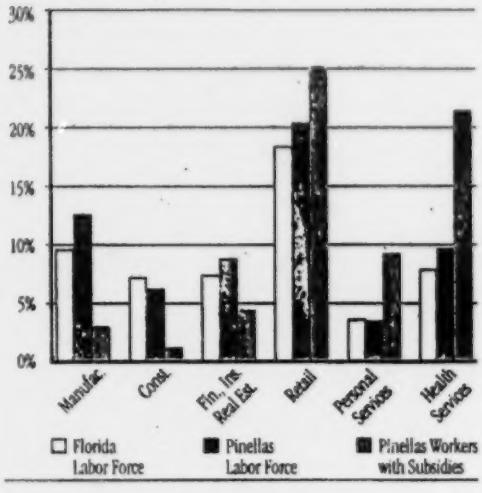


Table F-4: Employment by industry of workers receiving subsidized child care in Pinellas County, Florida

		Pinellas: Subsidized	Pinellas: Overall	Florida: Overall
Retail		25.30%	20.40%	18.10%
Services	**Health Services**	21.90%	9.70%	7.80%
	Business Services	8.10%	5.60%	5.20%
	Educational Services	4.90%	5.00%	6.40%
	Professional Services	10.30%	6.40%	5.70%
	Personal Services	9.10%	3.90%	4.10%
Manufacturing		3.50%	12.30%	9.70%
Public Administration		4.80%	3.60%	4.60%
Finance, Insurance, Real Estate		4.60%	8.80%	7.50%
Wholesale Trade		—	3.90%	4.30%
Transportation		—	3.10%	4.40%
Construction		1.50%	6.30%	7.20%
Communication		—	2.80%	2.70%
Agriculture		—	—	—
Other		6%	8.20%	12.30%

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it clear in which industries workers receiving child care subsidies are concentrated. For example, only 9.7 percent of the Pinellas labor force is employed in the health services industry, whereas 21.9 percent of subsidy recipients work in the health industry. From the graph, we can see that workers receiving subsidy are overrepresented in retail, personal services and health services, and underrepresented in manufacturing, construction, and finance, insurance, and real estate industries.

Two graphs shown above are created based on the following table.

Please note that category "Personal Services" under the SIC system has changed to "Accommodation and Food Services" under the NAICS classification.

Since two-digit codes are broad and include diverse types of businesses, a more detailed description of a sector will help readers to get more insights. Figure F-6 shows a breakdown of business services by types of services, and Table F-5 identifies employers' names in retail industry.

Breakdown of Business Services
Figure F-6

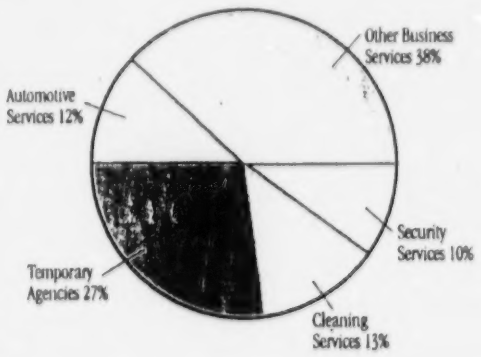

Table F-5: Name of retailers in Dade County, Florida who employ 1% or more of parents receiving subsidies[7]

Retailer Names	Percentage	Type of Retail
Publix	7.52	Food/Convenience
WinnDixie	5.26	Food/Convenience
Auto Service	5.26	Other Retail
Burger King	3.51	Eating Places
McDonalds	3.13	Eating Places
Wal-Mart	3.13	Dept/Drug Stores
Goodwill	2.51	Other Retail
Eckerd	2.38	Dept/Drug Stores
K-Mart	1.63	Dept/Drug Stores
Denny's	1.63	Eating Places
Wendy's	1.50	Eating Places
Burdines	1.50	Dept/Drug Stores
JC Penny	1.13	Dept/Drug Stores
Home Depot	1.00	Other Retail

[7] *Based on Griesinger, Chipty, and Witte, Employment of Parents Receiving Subsidized Child Care in Dade County, Florida, p.7.*

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Data such as that shown in Table F-5 have helped engage employers of large numbers of subsidy recipients in creating affordability solutions. They are unlikely to be aware of the amount of support they receive from the subsidy program without the kind of information the study provides.

Further Analysis

Depending on the availability of more detailed data or different data, we can extend the basic analysis in a different direction or conduct more in-depth analyses.

If data on other low-income parents not receiving child-care subsidies are available, as in the Oregon study, the researcher can employ the same methodology and presents the results in the same manner as Figure F-5.

If addresses of subsidy recipients, employers or child care providers are known, a researcher can geocode locations and show them on a map. Geocoding enables a researcher to map out locations of subsidy recipients' homes, employment, and child care providers, as was done in the Washington DC study. Figure F-7 shows work location of subsidy recipients in Washington DC.

We hope that other partnerships will replicate the employer study in their county or state. We also hope they will extend the study. Within this paper, we explored possible areas for further research in the section titled, "Areas for further research." We are confident that others can design even more ways to increase understanding of the lives of low-income working parents. Another hope is that partnerships around the country will share their findings as part of a larger effort to build a more comprehensive picture of the employment status of low-income parents who receive child care subsidies. We envision geographic comparisons and opportunities to capture change over time.

We request that you send findings of local studies to:

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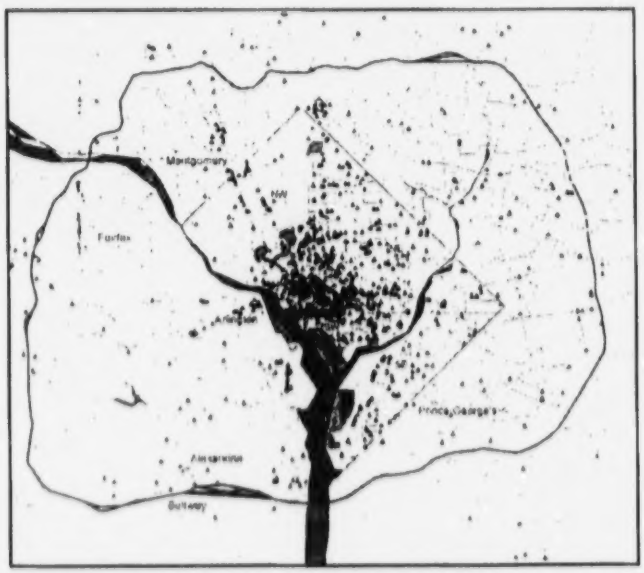
Child Care Bureau
Administration on Children, Youth and Families
330 C Street. SW
Washington, DC 20447
Phone: 202-690-6705
Fax: 202-690-5600
Email: pdivine@acf.dhhs.gov

Employment Loction of Subsidy Recipients[a]

Figure F-7



Source: DC Agenda and The Urban Institute. District of Columbia Parents Receiving Subsidized Child Care: Where Do They Live & Work? p. 15.

[a] DC Agenda and the Urban Institute, District of Columbia parents receiving subsidized child care: Where do they work?, p. 15.

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